

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

2-23-96

In the Matter of)
)
Amendment of Part 97 of the)
Commission's Rules Governing)
the Amateur Radio Service to)
Facilitate Spread Spectrum)
Communications)

RM - 8737

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To: The Commission

STATEMENTS IN OPPOSITION

SouthEastern Repeater Association, Inc.

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These comments of opposition come from the SouthEastern Repeater Association, Inc., a legal non-profit corporation, incorporated in North Carolina, and representing Amateur Radio VHF and UHF coordination interests in the eight States of North Carolina, South Carolina, Virginia, Tennessee, West Virginia, Kentucky, Georgia, and Mississippi.

The SouthEastern Repeater Association, Inc., hereafter known as SERA, is the nation's largest independent Amateur Radio VHF/UHF Repeater Coordinator, and is staffed with the finest of radio amateurs and volunteer communications professionals who are responsibly concerned with effective regional and national spectrum management as they impact the Amateur Radio Service.

We make this statement of opposition on behalf of our membership, within the Amateur Radio Service (ARS), for their protection from the petitioner's most frivolous and deleterious filing to date, to protect existing and future narrowband ARS systems and networks from serious compromise.

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Should the Commission's rules on spread-spectrum (SS) be flexible? It is our contention that they should not. The rules, as they are, and have existed since 1985, are already too loose and flexible. Though SS systems are fully capable of causing harmful interference with the rules as they exist today, they have served to have a positive chilling effect on the implementation of such interfering systems.

The petition, concerned with spectrum above 225 MHz, if adopted, will have a chaotic impact on the extremely popular 70 cm band (420-450 MHz). The 70 cm band, though shared, is rapidly filling with users of all existing modes. These modes include traditional weak signal terrestrial transmission (CW, SSB, etc.), amateur satellite uplinks and downlinks, amateur fast-scan television, packet radio and other relatively narrowband digital modes, FM repeaters, auxiliary stations, and voice simplex operations. The proponents of each of these modes are currently vying for dedicated slices of the 70 cm band, and none of these modes are compatible with the wideband noise typical of SS.

The key to Amateur Radio's effectiveness as a public service communications tool has been its ability to communicate under adverse propagation conditions using various innovative techniques, and being equipped with the most modest radio transmission equipment and power systems. In practical terms this translates to, using low power and weak signals to get critical message traffic delivered.

Would there be intra-service interference? Yes! While the existing rules have already been perverted, since 1985, to allow insertion of text at 97.311(b) to state, "unintended triggering of carrier operated repeaters is not considered to be harmful interference," SS signals of sufficient strength to accomplish this effect would degrade communication channels to the detriment of these systems, and seriously degrade or obliterate weak narrowband signals typical of emergency communications.

Would there be inter-service interference? Yes, there is the potential for this to occur, as SS emissions are currently authorized in shared spectrum allocations.

Would there be monitoring difficulties and illicit use of SS emissions? The answer, quite obviously, is yes. The mode, developed for use by the military and State Department, was not intended as a tool for spectrum conservation, but primarily to facilitate secure transmission. With the virtually unlimited number of encoding combinations that would be allowed by these proposed rule changes, it would be exceedingly difficult to decode content for common monitoring or enforcement purposes. This would make the mode very appealing to undesirable or criminal elements, as powerful equipment capable of operating in ARS spectrum would become readily available. Further, even though the

petition references "brief test transmissions of SS emissions," we believe such brief transmissions have the potential to become frequent to the point of being routine. Therefore, we believe the ARS would become a target for commercial or unlicensed encroachment.

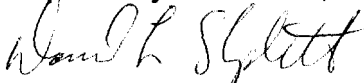
The petitioner's pro-SS arguments in this matter only address technical and experimental concerns, and do not seriously consider the ill effects of the co-spectrum use of SS and existing narrowband systems in already crowded spectrum.

The petitioner has failed to weigh the impact of its proposal on practical narrowband modes in aspects relating to vital emergency public service operations.

The petitioner has assumed that the sole purpose of the ARS is for experimentation, and has petitioned for rule changes that will result in harmful interference, while subjecting other authorized spectrum users to unwitting use as guinea pigs in experiments of dubious value.

Considering the foregoing facts, it is our request that the Commission reject the petition (RM-8737), and that the matter not be reconsidered until satisfactory spectrum can be located above 902 MHz for SS experimentation without detrimental impact to existing narrowband usage.

Respectfully Submitted,



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